

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 6. (Cancelled)

7. (Currently Amended) A bonded body of a bonding member and a member to be bonded, which are used in a device for rotating the bonding member on which rotary disks are stacked and the member to be bonded serving as a rotary shaft in integral bonding:

wherein the bonding member has a bonding hole into which the rotating shaft is insertable, with preliminary bonding marks being formed in a vicinity of the bonding hole, and plastic bonding marks being formed at the bottom of the preliminary bonding marks whereby formation of the preliminary bonding marks and bonding projections flows the material in the vicinity of the bonding hole towards the rotating shaft to integrate the rotating shaft and the bonding member, a portion, in the vicinity of the fitting portion of the member to be bonded, of the bonding member is pressurized at a load for generating a stress enough to plastically deform the material of the bonding member, to effect preliminarily plastic bonding;

further the portion, in the vicinity of the fitting portion of the member to be bonded, of the bonding member is pressurized at a load in excess of an elastic limit of the material of the bonding member; and

a compression force in an axial direction of the to-be-bonded member is generated at the portion in the vicinity of the fitting portion of the bonding member, and then, part of the material of the fitting portion in excess of the elastic limit is allowed to plastic-flow in such a manner as to fill a clearance defined between the member to be bonded and the bonding member;

whereby the bonding member and the member to be bonded are tightly integrated with each other and the preliminary and plastic bonding marks remain on the completed bonded body.

8. (Original) A bonded body of a bonding member and a member to be bonded as claimed in claim 7, wherein an annular groove is provided at the fitting portion of the to-be-bonded member to the bonding member.

9. (Original) A bonded body of a bonding member and a member to be bonded as claimed in claim 8, wherein a knurl is formed at the annular groove formed at the fitting portion of the to-be-bonded member to the bonding member.

10. (Currently Amended) A mechanical apparatus provided with a bonded body of a bonding member and a member to be bonded, which are used in a device for rotating the bonding member on which rotary disks are stacked and the to-be-bonded member serving as a rotary shaft in integral bonding;

wherein a portion, in the vicinity of the fitting portion of the to-be-bonded member, of the bonding member is pressed to provide a plastically deformed part, which is in the vicinity of the fitting portion of the to-be-bonded member with preliminary bonding marks being formed in a vicinity of a bonding hole and is further pressed, to effect plastic-flow bonding with plastic bonding member being formed at a bottom of the preliminary bonding marks such that the preliminary and plastic bonding marks remain.

11.-20. (Canceled)

21. (Currently Amended) An integrated bonded body, comprising:

a rotating shaft; and a bonding member bondable to said rotating shaft, wherein the bonding member has a bonding hole into which the rotating shaft is insertable, with preliminary bonding marks being formed in a vicinity of the bonding hole, and plastic bonding marks being formed at the bottom of the preliminary bonding marks whereby formation of the preliminary bonding marks and bonding projections flows the material in the vicinity of the bonding hole

towards the rotating shaft to integrate the rotating shaft and the bonding member, wherein the preliminary and plastic bonding marks are present in the integrated bonded body.

22. (Previously Presented) The integrated bonded body according to claim 21, wherein an annular groove is formed around the rotating shaft at the bonding portion thereof, and material in a vicinity of the bonding hold effects plastic flow towards the rotating shaft.

23. (Previously Presented) The integrated bonded body according to claim 22, wherein the rotating shaft is provided with a plurality of grooves.

24. (Previously Presented) The integrated bonded body according to claim 23, wherein the plurality of grooves constitutes two grooves.

25. (Previously Presented) The integrated bonded body according to claim 22, wherein a cross sectional area of the grooves is of triangular shape.

26. (Previously Presented) The integrated bonded body according to claim 22, wherein a compression stress is exerted on the annular groove, and a stress is exerted on a portion of the rotating shaft other than the annular groove.

27. (Previously Presented) The integrated bonded body according to claim 22, wherein the bonding member has a deformation resistance smaller than that of the rotating shaft.

28. (Previously Presented) The integrated bonded body according to claim 22, wherein the annular groove is provided with a knurl.

29. (Currently Amended) An integrated bonded body, comprising:
a rotating shaft; and a bonding member bondable to said rotating shaft, wherein the bonding member has a bonding hole into which the rotating shaft is insertable, with annular preliminary bonding marks being formed around the bonding hole, and plastic bonding marks being formed at the bottom of the preliminary bonding marks, whereby formation of the preliminary bonding marks and bonding projections flows the material in a vicinity of the bonding hole towards the rotating shaft to integrate the rotating shaft and the bonding member such that the preliminary and plastic bonding marks remain in the integrated bonded body.

30. (Currently Amended) A mechanical apparatus provided with an integrated bonded body, comprising:

a rotating shaft; and a bonding member bondable to said rotating shaft, wherein the bonding member has a bonding hole into which the rotating shaft is insertable with preliminary bonding marks being formed in a vicinity of the bonding hole, plastic bonding marks formed at the bottom of the preliminary bonding marks, whereby the formation of the preliminary bonding marks and the bonding projection flows the material in the vicinity of the bonding hole towards the rotating shaft to integrate the rotating shaft and the bonding member such that the preliminary and plastic bonding marks remain in the integrated bonding body.